

CLAIMS

The invention claimed is:

1. A well downhole liquid dispenser comprising an inlet port in fluid communication with the shoulders of a conically-shaped piston and one or more discharge ports in fluid communication with the point of said conically-shaped piston through a discharge channel, wherein the point of said conically-shaped piston is held in physical contact with and closes said discharge channel by tensioning means, wherein said tensioning means may be adjusted to vary the pressure exerted by said tensioning means on said conically-shaped piston.
2. The well downhole liquid dispenser of claim 1, wherein said well downhole liquid dispenser further comprises a check valve located within said inlet port, wherein said check valve allows fluid to flow from said inlet port through said discharge ports, but does not allow fluid to flow from said discharge ports through said inlet port.
3. The well downhole liquid dispenser of claim 1, wherein said tensioning means comprise a spring, and wherein the tension on said spring may be adjusted by moving an adjustment screw.
4. The well downhole liquid dispenser of claim 2, wherein said tensioning means comprise a spring, and wherein the tension on said spring may be adjusted by moving an adjustment screw.
5. A well downhole liquid dispenser, comprising:
 - a. a tubular spring housing within which a piston having a conically-shaped end is placed, and wherein said piston is held in place at one end of said tubular spring housing by tensioning means also placed within said tubular

spring housing, and wherein said tensioning means may be adjusted by adjustment means;

b. an inlet/discharge port assembly attached to said tubular spring housing at the end wherein said piston is located, wherein said inlet/discharge port further comprises:

i. an inlet port fluidly connected to the shoulders of the conical portion of said piston within said tubular spring housing by one or more vertical inlet channels which are positioned away from the center of said inlet/discharge port assembly;

ii. one or more discharge ports fluidly connected to the point of the conical portion of said piston within said tubular spring housing by a vertical discharge channel positioned at the center of said inlet/discharge port and intersecting a horizontal discharge channel which fluidly connects said vertical discharge channel to said discharge ports;

c. wherein said point of said conical portion of said piston is held in physical contact with said vertical discharge channel by said tensioning means and wherein said piston may be actuated within said tubular spring housing.

6. The well downhole liquid dispenser of claim 5, wherein said tensioning means comprise a spring, and wherein said adjustment means comprise an adjustment screw, wherein said spring is placed between said piston and said adjustment screw.

7. The well downhole liquid dispenser of claim 5, wherein said inlet/discharge port assembly further comprises a check valve placed within said inlet port, wherein said check valve is held in said inlet port by a check valve seat plug.
8. The well downhole liquid dispenser of claim 6, wherein said inlet/discharge port assembly further comprises a check valve placed within said inlet port, wherein said check valve is held in said inlet port by a check valve seat plug.